

California **GARDEN**

MARCH-APRIL 1977

*Volume 68, Number 2
Fifty Cents*



.....FLORAL MEETINGS.....

March 8th: Flower arranging program by Mrs. Ross Alger, a noted flower arranger from the Los Angeles area. The program entitled "Tea and Flowers" will begin at 1:00 p.m. in Room 101, Casa del Prado, Balboa Park. All members of our Affiliate Clubs are invited as guests of Floral Association and there will be a general public donation of \$2.00.

March 22nd and April 26th: Mrs. Kirkpatrick's flower arranging classes, Room 101, Casa del Prado.

April 19th: Mr. Chuck Kline, head of horticulture at Sea World will speak about the gardens and estates of the Monterey Peninsula.

April 24th: Dr. & Mrs. Wm. L. Nelson, members of Floral Association, have invited all members of the Floral Association to a personally conducted tour of their exciting nursery, Nelson's Pine Patch. There are many rare trees and native plants to see and hear about. They will even have a little gift for each visitor. The address is 4301 Linwood Drive, Chula Vista, and the time is 1:00 to 3:30 p.m.

Every Thursday: Beverly Kulot, chairman, conducts a workshop at the Floral Office; 10:00 a.m. to 3:00 p.m.

.....TOURS.....

March 27th: Descanso Gardens and Daffodil Show; camellias and azaleas will be in bloom. Depart from Balboa Park at 8:00 a.m. and La Jolla at 8:30 a.m.; \$9.00.

April 2nd: Palm Springs Trip; \$10.50.

April 16th: Los Angeles area—Greek Cathedral and Exposition Park; \$8.50.

Please call the Floral office at 232-5762 for details on all tours.

.....SHOWS.....

March 18th, 19th, 20th: Lectures on How to Prepare Your Garden in Spring and Summer, presented by Albert Wilson, author, botanist, horticulturist who taught at the University of California. The lectures will be at the Wild Animal Park—call the Zoo for further details.

March 19th and 20th: San Diego Chapter 119 Ikebana International will host its Ninth Annual Festival of Ikebana and Japanese Art; "Showers of Flowers" (Harusame). Open both days 11:00 a.m. to 4:30 p.m. in the Majorca Room, Casa del Prado, Balboa Park.

March 25th, 26th, 27th: San Diego County Orchid Society will present its 31st Annual Show in the Conference Building, Balboa Park. On March 25th the Preview-Reception will be from 7:00 to 10:00 p.m.; March 26th, open 10:00 a.m. to 10:00 p.m.; March 27th, open from 10:00 a.m. to 5:30 p.m.; admission is \$1.00.

April 3rd: Convair Garden Club presents its Rose Show in the Majorca Room, Casa del Prado, Balboa Park; open 1:00 p.m. to 5:00 p.m.; FREE.

April 16th and 17th: The San Diego Rose Society will hold its Annual Rose Show in the Conference Building, Balboa Park; Saturday, 2:00 p.m. to 9:00 p.m.; Sunday 10:00 a.m. to 6:00 p.m.; admission .50 cents.

April 16th and 17th: Balboa Park African Violet Society will hold its Second Annual Violet Show in the Majorca Room, Casa del Prado, Balboa Park; open both days 11:00 a.m. to 5:00 p.m.; admission is FREE.

April 16th and 17th: San Diego-Imperial County Iris Society sponsors an early show at the lower level fountain on the Mall at Plaza Camino Real, Carlsbad, California; the show closes at 4:30 p.m. on Sunday April 17th.

April 16th and 17th: Coronado Floral Association presents "Flower Fantasy" at Spreckles Park, Coronado (Orange Avenue); Saturday 1:00 p.m. to 5:00 p.m.; Sunday 10:00 a.m. to 4:00 p.m.

April 23rd and 24th: San Diego Bonsai Club, Inc., presents their 12th Annual Exhibit in the Majorca Room, Casa del Prado, Balboa Park; 10:00 a.m. to 6:00 p.m. both days; FREE.

April 30th to May 1st: Vista Garden Club will present a Standard Flower Show, "Spring Magic" at 160 Recreation Way, Vista, California; Saturday 1:30 p.m. to 5:00 p.m.; Sunday 10:00 a.m. to 4:00 p.m.; FREE.

May 8th: San Diego Epiphyllum Society presents "Down Mexico Way" in the Majorca Room, Casa del Prado, Balboa Park; 11:00 a.m. to 5:00 p.m.; FREE.

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ABOUT THE COVER

Our cover, a native cypripedium, is created by Michael D. Klein. Mr. Klein is a wildlife and botanical illustrator, currently residing on the east coast.

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KIWIFRUIT

by GEORGE JAMES

THE BOTANICAL NAME of the plant that bears the kiwifruit is *Actinidia chinensis* Planch. This deciduous vine native to South Central China was introduced to New Zealand about 1906. Selections were made from seedling plants that had the best fruit bearing habits and the choicest fruit. Offspring of these were brought to California in the 1930's. Commercial plantings have not occurred very fast—by 1976 it was estimated that there were a little over 1,000 acres planted, most of which had been planted in the several years prior to 1976. These plantings are not yet old enough to bear fruit.

The plant is a large growing vine, said to be capable of reaching 30 feet, having many branches and side shoots forming a dense plant. The sexes are on separate plants, so two plants are needed if fruit is to be produced.

The name "kiwi" given to the fruit by the New Zealanders comes from the resemblance between the green-skinned fruit covered with brown hairs and the Kiwi bird. Sometimes also called Chinese gooseberry because it originated in China, the color of the fruit reminds one of the gooseberry. For commercial reasons, attempts are now being made to standardize the name as kiwifruit.

The fruit is about the size and shape of a hen's egg and the flesh is an emerald-green color with small black seeds in the center. The seeds are edible. The fruit is delicious when eaten alone as fresh fruit or mixed with other fruits; it may be canned, frozen, used in jellies or jams, and cooked for use as pie fillings. In 1975, the Kiwi Growers of California published a cook book having recipes for the use of kiwifruit in appetizers, salads, desserts, and beverages, as well as how to use them in combination with fish, poultry and meats.

Over winter, the plant is dormant, without leaves. New leaves begin to grow in March, the flowers come along in May, and fruit is formed and matures about November. The plant will bear

fruit when 4 years old and it reaches maturity and a maximum production at 10 years of age. Seedling plants are unreliable in both habit of bearing and quality of fruit, and the sex of such plants can not be determined until the plants are old enough to bloom. Therefore, it is recommended that plants that have been propagated by either cuttings or grafting be planted. They will have the same sex as the parent plant, and in the case of the fruit bearing plant, will bear the same kind of fruit as the parent plant. The Hayward (sometimes called Hayward Chico) is the fruit-bearing variety now being planted in California. A male or pollen producing plant must be planted and it should be close to the female or fruit bearing plant, as insects are the pollen carriers. In commercial plantings, one pollinizer is planted to serve nine female plants.

Kiwifruit plants are grown from San Diego north to Chico and commercial plantings can be found in the San Joaquin Valley. The young foliage and tender spring growth are damaged by temperatures of 31 degrees F., while the dormant plant can withstand temperatures to 10 degrees F. A location suitable for kiwifruit is one having sun the greatest part of the day, not subject to late spring frost, and protected from strong winds, as the forming fruit is damaged if wind action causes it to rub against other parts of the plant. The plant is able to grow on a wide range of soils, but it must have good drainage, as it will not tolerate wet feet. Frequent irrigations are necessary during the growing season. A mature plant will use about 1 pound of actual nitrogen per year. Five pounds of ammonium sulphate, 6 pounds of blood meal, or 16 pounds of 6-10-4 are the equivalent common fertilizers needed to supply 1 pound of actual nitrogen.

This vining plant is best grown on a frame of wood or wire, much like the type used to support cane berries, and grapes. The only exception for kiwifruit is that the frame must be

stronger and better braced to accomodate the heavier vine produced by the kiwifruit. In commercial plantings, the vines are spaced 18 to 20 feet apart. Home gardeners should space their plants about the same distance apart, and while it is not likely home gardeners will have more than one row, the 15 foot spacing will allow for the necessary 6 to 7 foot distance from fences, buildings, or other plants, and allow for work space around the plants.

The vines are pruned during the summer by removing some of the new growth so the plant doesn't become too dense thereby reducing fruit production. In the winter, after the crop has been harvested, the weakest bearing shoots are cut out so that new and more vigorous ones may grow. The vine can be host to some common garden pests such as caterpillars, mites, or spiders. Its roots are attacked by root-knot nematodes, but the chance of damage from this pest can be greatly reduced by fumigating the soil before planting.

Those gardeners who enjoy the challenge of understanding new plants may want to try the kiwifruit. Plantings are now available at some local nurseries. With proper care, your reward will be an exotic fruit to share with family and friends. □

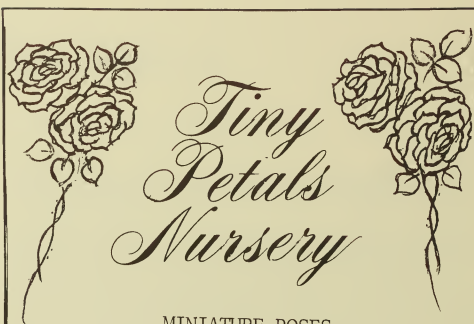
The author wishes to thank Dr. William Nelson of Nelson's Pine Patch in Chula Vista for his advice and the loan of reference materials for use in writing this article. The reference materials used were "Growing Chinese Gooseberries" published by the New Zealand Ministry of Agriculture and Fisheries; "Kiwifruit Recipes" published by Kiwi Growers of California; the Cooperative Extension of the University of California and County of San Diego publications "Irrigation of Newly Planted Kiwi Plants," published October, 1976; "The Kiwi" by C.D. Gustafson, Farm Advisor; a publication of the University of California, Division of Agricultural Sciences "Kiwi Production" by Dr. James Beutel; and an article in California Agriculture for October, 1976, "A New Crop for California, Kiwifruit."



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SANGA-FUNE

by SADAKO OEHLER

Sadako Oehler is a Senior Professor in the Ikenabo School. She has been lecturing and teaching flower arranging in Southern California for more than 12 years.

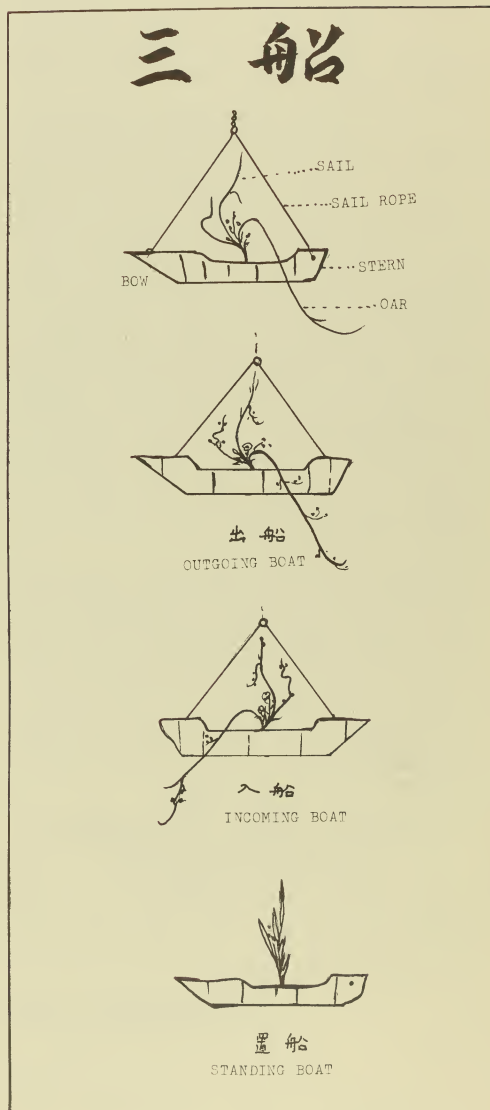
ONE "CLASSIC IKEBANA" style of the "Ikenobo School of Japan" consists of three *Shoka* forms used in ship shaped containers. These arrangements are primarily for happy occasions and are called "Sanga Fune."

"Tsuribune" (a hanging boat) symbolizes a sailing ship with its sails filled with wind. There are two ways of arranging flowers in "Tsuribuni": one is "De-fune," an outgoing boat with the bow pointing to the left, and the other is "Iri-bune," an incoming boat with the bow pointing to the right. In both forms the boat containers should be suspended from the ceiling. Flowers for the outgoing form are arranged to express extremely delicate movement and the container is hung high to show the feeling of a far-off sea. To show the nearer sea for the incoming form, flowers are arranged to express less movement and the container is hung lower.

In the "Oki-fune" form (ship at anchor, standing boat) the container is placed on a flower stand with the bow pointing either to right or left. Flowers are arranged to convey a feeling of the tranquil repose of a boat in a safe harbor with only the line of the bare mast showing above the hull.

In all three forms of this style the water in the boat container should not be visible as this is an ill omen of a ship sinking.

Containers used for "Tsuribuni" are traditionally made of bamboo, while containers for "Oki-fune" may be made of bamboo, earthenware, or wood. □



INDOOR BONSAI?

by EDMOND O. MOULIN

Our author is Horticulturist at the Brooklyn Botanic Garden. Reprint permission for this article obtained from Frederick McGourty, Jr., Editor "Plants & Gardens." The drawings are by Steven Steward.

INDOOR PLANTS for bonsai? Why not! It makes excellent sense to experiment with them. Some of the little gems you have seen today are well-known house plants anyway, and by adapting the traditional pruning and potting techniques practiced by the ancients of Japan it is possible to bring a refreshing innovation to this fascinating art. Try it—you'll love it!

Let's talk about some of the preliminary points for growing indoor bonsai. All plants, bonsai or otherwise, require light, and some of them, especially those grown for their attractive flowers or fruit, need more light than others. Plants grown indoors never receive as much natural light as ones grown in the garden, so their placement becomes all the more important. If at all possible, choose an unobstructed east, west or south window. The latter site is best in winter, especially for plants with the greatest light requirements.

Don't despair of growing indoor bonsai if they can't be given enough natural light. Try them under artificial light. This kind of gardening has become very popular in recent years, and a variety of moderately priced units are now available, along with automatic timers. The cool white fluorescent tubes combined with incandescent bulbs, Vita Lite or Agrilite, may be used on indoor bonsai with excellent results. The practice is to provide artificial light for about 16 hours a day at a distance of 4 to 12 inches above the plant. More light can be provided by vertical banks-of fluorescent lamps.

Key point: frequent watering is always important for bonsai, but even more so in summer when plants are exposed to the desiccating rays of the hot sun. Also, house plants used for bonsai are always growing, but most actively in spring and summer, so their water needs increase then.

Most people are comfortable with a house temperature of a constant 68 to 72 degrees F. day

and night. Plants generally perform better if the temperature at night is 10 or 15 degrees cooler than in the day. Fortunately, however, both people and plants are moderately adaptable creatures. First, consider lowering the thermostat a few degrees at night. It's a good conservation practice these days anyway, heating bills will probably be less, and the plants will grow better.

Another point to remember is that even our modern, centrally heated homes have microclimates of sorts, and these may be put to work for indoor bonsai. Thermostats are usually set at eye level, but the temperature near the floor is lower. In a well-ventilated house the temperature can vary as much as 10 degrees for every 3 feet of height. An additional way of providing a cooler location for indoor bonsai is to place them between the window and a pair of heavy drapes. At night when the drapes are closed, the lower temperature will benefit the plants.

The worst enemy of indoor bonsai is dryness, for our contemporary abodes are as arid as the Sahara. The higher the temperature is, the lower the relative amount of moisture in the air will be. There are various corrective measures to be sure, including installation of a humidifier, revival of the Victorian technique of grouping plants, misting of foliage (though this has but brief benefit), and the placement of pots on moist gravel. Some innovative gardeners have even experimented with growing indoor bonsai in modified terrariums, enclosed but away from the direct rays of the sun.

Because bonsai are grown in small containers, they require more frequent watering than do many house plants, and the grower must be ever alert to their needs. But what happens when you want a vacation? Try the "bonsai-sitter bag." It's also an aid for acclimating plants newly purchased from a greenhouse or to nurse recently root-pruned bonsai through a critical period. Here's how it works: Use a clear plastic bag large enough to envelop the plant and container. Care is essentially the same as for a terrarium. Water the soil



well and let it drain thoroughly before placing container in the bag. Make a "bubble" so bag doesn't touch foliage. The bag may have to be opened occasionally to allow excess moisture to evaporate. This works well for about two weeks, and no water will likely have to be added during this time. Open bag gradually over several days to gradually acclimate the plant to drier surroundings.

Do not be dissuaded from raising indoor bonsai because a few extra steps are involved in their care. This is an exciting new way of growing plants and you can put your imagination to work in a beautifully creative fashion. Remember, if you can grow house plants, you can grow indoor bonsai! □

The following is a list of bonsai and companion plants suitable for indoor culture. They are listed by scientific name, common name, habitat, description, and family. The description of the plant relates to its maximum height in its native habitat and not to its growth in a container indoors. Cultural directions will be found at the end of this list. A culture code for each plant is noted at the right of the plant name.

Arundinaria viridi-striata

Japan
10' bamboo companion
Gramineae 4

Bucida baceras

Black-Olive
Florida, W. Indies to Panama
tree - 50'
Combretaceae 1

Buxus microphylla var. koreana

Korean Box
Korea
shrub - 1½' to 2'
Buxaceae 5

Buxus microphylla 'Compacta'

Kingsville Dwarf Boxwood
shrub - 1½' to 2'
Buxaceae 5

Camellia japonica

Japanese Camellia
shrub - 40'
Theaceae 4 OR 6

Camellia sasanqua
shrub
Theaceae 4 OR 6

Cuphea hyssopifolia
False Heather
Mexico, Guatemala
shrub - 2'
Lythraceae 3

Duranta repens
Golden Dewdrop
Mexico, W. Indies
shrub, tree - 18'
Verbenaceae 1

Gardenia jasminoides var. radicans
Gardenia
China, Japan
shrub - 1'
Rubiaceae 2

Grevillea robusta
Silk Oak
Queensland, New South Wales
tree - 150'
Proteaceae 3

Homalocladium platycladum
Ribbon Bush
Solomon Islands
2' to 20' herbaceous companion
Polygonaceae 3

Olea europaea
Olive Tree
Mediterranean
tree - 30'
Oleaceae 3

Polyscias fruticosa 'Elegans'
Polynesia
shrub - 8'
Araliaceae 1

Psidium cattleianum
Strawberry Guava
Brazil
shrub - 10'
Myrtaceae 3

Punica granatum var. nana
Dwarf Pomegranate
Iran to Himalayas
shrub - 6'
Punicaceae 3

Rosmarinus officinalis
Rosemary
S. Europe, Asia Minor
shrub - 6'
Labiatae 3

Sequoia sempervirens
California Redwood
California, Oregon
tree - 365'
Taxodiaceae 3 TO 5

CULTURE CODE

1. High light intensity and warm temperatures.
Unobstructed south window is best.
Night temperature range: 62 to 67 degrees F.
Day temperature range: 72 to 80 degrees F.
2. Diffused light and warm temperature.
Unobstructed south, east, or west window or fluorescent lights.
Night temperature range: 62 to 67 degrees F.
Day temperature range: 72 to 80 degrees F.
3. High light intensity and cool temperature.
Unobstructed south window is best.
Night temperature range: 55 to 60 degrees F.
Day temperature range: 65 to 75 degrees F.
4. Diffused light and cool temperatures.
Unobstructed south, east, or west window or fluorescent lights.
Night temperature range: 55 to 60 degrees F.
Day temperature range: 65 to 75 degrees F.
5. High light intensity and cold temperature (this condition prevails in the cool, freeze-free sun porch).
Unobstructed south window is best.
Night temperature range: 40 to 50 degrees F.
Day temperature range: 55 to 65 degrees F.
6. Diffused light and cold temperature (this condition prevails in the cool, freeze-free sun porch).
Unobstructed south, east, or west window or fluorescent lights.
Night temperature range: 40 to 50 degrees F.
Day temperature range: 55 to 65 degrees F.

JUST PEANUTS

by ROSALIE GARCIA

AS THE Chinese would say, this is the Year of the Peanut. Our new President, Mr. Carter, has brought this vegetable into prominence again because he is from Georgia, the largest peanut producing state, and because the Carter's family business is growing and processing peanuts.

In the late 19th century, 200 years after peanuts were first known in this country, a famous agricultural scientist, George Washington Carver, developed 300 products from peanuts and got the publicity to promote them. He made cheese, silk, coffee, and flour substitutes from peanuts, as well as ink, dyes, plastics, wood stains, soaps, linoleum, medicinal oils, and cosmetics. Along with the soybean, we have more useful products from these two legumes than from all other vegetables. Agricultural scientists and chemists are continuously developing and refining uses for the little bean which, depending on where it is grown, can be called a nut, or groundnut, monkey-nut, Pistacho de Terre, manilla nut, or good old Southern goober.

The Spanish found peanuts thriving on Inca farms in Peru. Archaeologists believe that the Andean peoples had been growing them for 2,000 years before the Spanish came in the 16th century and that these peoples had transplanted them from the jungles of the Amazon. Although they are now grown in all tropical areas of the world, they are grown in commercial quantities only in Africa, India, tropical Asia and the United States.

Peanuts were first grown in Virginia in the 17th century. Of the two best known, the larger is the Virginia peannut, usually with two large seeds to the pod; the Spanish peanut is the smaller and sweeter one with two or more seeds to the pod. Our Southern states of Georgia, Alabama, Texas, the Carolinas, Florida, Oklahoma, and Virginia—in that order—were the producers of a 3,688 million pound crop in 1976—the fifth largest food crop in this country. A plant that can produce a pint of peanuts or more and a yield of 2,400 pounds per acre at the current price of 20 cents a

pound is a money crop a farmer can respect. Georgia produced twice as many as any other state. It has the sandy, loamy soil, the 24 inches of rainfall, and at least five months of warm to hot weather for growing *Arachis hypogaea*, the tropical bean we call a peanut. California's best soil and climate are not located with the necessary 24 inches of rain, and the cost of irrigation water is high enough to make peanut growing unprofitable in our state.

About two-thirds of the U.S. crop of peanuts for food goes into peanut butter, a staple in the American diet. The roasted ones go into snacks, cookies, candies, and breads. I can find no statistics on how many are fed to the elephants! After harvesting, a great amount of the tops goes for hay. A high protein stock food is made from the dried cake after the oil has been expressed from the peanuts. Nothing of the peanut is wasted. The hulls are ground into animal food or industrial products; hulls are often sold as mulch.

As a food, peanuts have it! Being half fat, their oil is a big industrial product used in hundreds of manufactured articles, as well as for food. With 27 percent protein, they are a good meat substitute. Soluble carbohydrates of 17.5 percent makes a handful of peanuts, a stick of celery, and an apple a fine lunch. But watch out! That bowl of roasted peanuts sitting around can be a catastrophe to the waistline if snacked too much. One cup of those crunchy, satisfying morsels is loaded with 800 calories! Parents should be careful about giving children peanut butter and jelly sandwiches. Besides being a fattening diet, both the peanut butter and the jelly are loaded with carbohydrates. The oil in the peanut butter holds the sugar in the jelly against the teeth for a long period of time—a major cause of dental cavities according to the late Dr. Harvey Stallard, a world renowned dentist.

We always had a peanut patch alongside the sweet potato plot back in Arkansas, as most farm people did when I was a child. Here we can

seldom buy raw peanuts, much less green ones, but if one grows his own as we did, you can have a new taste treat. A casserole or crock pot of shelled green peanuts with ham or salt pork and a green salad makes a good meal. Boiled young green peanuts are often served as a vegetable in African and Asian countries.

Is it worth it to grow our own peanuts? Frankly, I have never made a cost study, for I have grown only one row in my California garden. One can buy seed peanuts for about \$2.00 a pound. (You can see the difference in price between seed and bulk peanuts, as our President long ago realized.) A pound of seed of the Jumbo Virginia will plant a row about 75 feet long. This peanut comes in both bush and vining varieties with each vine spreading 3 to 3½ feet. A pound of the more often grown small Spanish peanut will plant a 200 foot row. Whether it is worth the water needed to irrigate peanuts in a home garden, I do not know. We do know that the commercial farmers in California do not think so.

The peanut is a unique annual, underground that grows from seed. It makes a small, bushy plant. The leaves are pretty, oval to oval obovate, and a little fuzzy. What makes this plant unique is the yellow, showy flower which soon withers, allowing the true pedicel to elongate and curve toward the ground. It dives underground where the ovary ripens into the reticulated pod and nut. Each pedicel produces a cluster of nuts. I have tried to catch it in the act of diving, but it must happen overnight, for I have never been successful. This unique trait makes frequent and deep irrigation necessary to keep the soil moist for proper growth. Since peanuts take 110 to 120 days to grow, one should plant in April or May for them to have plenty of time to mature. Cultivation around the plant is not required; just keep the weeds out and let it grow. When the plants turn yellow, pull them up, spread them out to dry, and later, remove the nuts. Use the tops for compost or turn them under in the soil as the commercial growers do. Unless the soil is too acid and needs some calcium, plowing the tops of the plant under will eliminate the need for fertilizers. This plant, as well as all other legumes, has the property of taking nitrogen from the air.

At one time in our history peanuts had little

status, even selling for four cents a pound, if one could sell them. In the 1940's the Federal Government set aside 5 million acres and provided generous subsidies for growing peanuts because the oil and feed were necessary for the war effort. Afterward this led to over-production and as a consequence producing acreage has been reduced to about 1½ million acres currently, with much of the subsidy removed.

We are still stuck with the old denigrating phrases "and that ain't peanuts" or as a contemptuous stamp of cheapness "just peanuts." But, this is the Year of the Peanut! □



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SPECIAL IRISES

by BILL GUNTHER

FAR TOO often, here in Southern California, we hear someone say "No more irises for my garden. In my garden they look nice during a few weeks in the spring, but during the whole rest of the year they are just scraggly-looking foliage. They are not worth the effort!"

Almost certainly, every gardener who talks that way is a gardener who has been growing the wrong type of irises for our locality.

The fact is that most of the irises which presently are grown in Southern California are not the best irises for this area. Our winters are too mild for them. Iris varieties which were hybridized and selected for their performance in the north or in the east are generally not good garden plants for Southern California. Lilacs and tulips and crocuses and hyacinths and dogwood all need a cold winter to trigger them into good spring-time growth and bloom; so do many irises. We should not persist in trying to grow those varieties of irises which do not perform well in our balmy climate.

All of the present day "garden irises" were derived originally from wild species, usually with many generations of hybridization and selection involved. There are many, many species of wild irises, some of them are native to cold winter areas such as Siberia while others are native to Mediterranean climates like ours. It is understandable that a garden iris which was derived from species native to a climate like ours will perform better in our local gardens than will a hybrid which was developed from species which evolved in cold climates. As regards performance, it is very important to remember that species which are from northern areas are "keyed" to a short growing season. They must rush out of a long winter dormancy into quick bloom and then rush to set their seeds before returning to dormancy with the return of freezing weather. This contrasts with the year-around growing season which is the heritage of species native to mild climates. Inherent with this contrast is the fact that species

native to mild climates tend to have foliage which is evergreen rather than deciduous, and they can bloom and rebloom throughout the year rather than just at one short season. These are qualities which we want in our gardens.

There are a number of companies, most of them located in colder climates than ours, which distribute irises by retail mail order. Their beautiful catalogues carry vividly brilliant colored pictures of various iris flowers, and many Southern California gardeners make selections from these catalogues simply on the basis of which color or colors they consider to be the prettiest. This is the worst possible way to select irises, because the color of an iris blossom has absolutely no relevance to the performance which that iris might give in this climate.

If in your garden there now are irises which will not perform well in this climate, dig them up and throw them out, then renovate the soil completely, then plant irises of varieties which by experience are known to be the best for this area.

If in your garden you have room for only one of the many hundreds of varieties of tall bearded irises which currently are offered for sale, order 'Cascade Pass.' It was hybridized and originated in the coastal area of Southern California, and it was selected for introduction because of its excellent performance in this locality. It responds to good care by sending up well-branched bloomstalks topped with large beautifully shaped white blossoms—not just in the springtime but off and on all through the year. During the last few years it has won far more honors in Southern California iris shows than has any other tall bearded iris. But don't send 'Cascade Pass' as a gift to your Aunt Minnie who lives in Minnesota because this iris does not like cold weather; in the east and in the midwest and up in the northwest it just sulks. It performs wonderfully in Southern California, elsewhere it performs miserably.

If you have garden space for just one spuria iris, order the variety 'Repertoire.' Southern

California's climate is almost ideal for spurias, so much so that it seems that all varieties grow taller here, and produce more blossoms per bloomstalk, than anywhere else on earth. But, the vast majority of spurias, even here, bloom only once each year. A few varieties, during some years and under favorable conditions, bloom twice a year. But 'Repertoire' is the only spuria ever known to have sent up bloomstalks from the same clump three different times (April, June, and November) in one year. Because 'Repertoire' has slimmer bloomstalks and less massive blossoms than most garden spurias, it is ideal for use in dinner table arrangements; the blossoms are white with a small cream colored signal.

If you like Japanese irises but have room for only one, order 'Scheherazade.' In Southern California most Japanese irises bloom only in June. 'Scheherazade' is different; it often seems to bloom at whim, off and on throughout the year, always with a candelabra-style bloomstalk, and often with three beautiful blossoms simultaneously open on the bloomstalk. Whenever this happens at showtime, nothing else in the show has a chance. 'Scheherazade' has won Queen-of-the-Show honors

over all types of irises at springtime and at winter-time shows in Southern California. No other Japanese iris has won equivalent honors anywhere, anytime. It is true that Japanese irises need more special care than do bearded irises and spuria irises; in particular they need acid-type fertilizer and swampy conditions. In the special case of 'Scheherazade,' this extra effort will be well rewarded.

Happy iris gardening!

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A CYPRIPEDIUM Usually Is Not

by BYRON H. GEER

This article is reprinted from CALIFORNIA GARDEN, April-May, 1965. In current accepted practice, the genus names are not capitalized except when they are a part of the botanical name.

THAT WHICH WE call a *Cypripedium* by any other name would be as charming, and this is a fortunate happenstance since that which we usually call a *Cypripedium* is no such thing. *Cypripediums* there are, indeed, but even the dedicated orchid growers can count on the fingers of one hand the number that they have actually been cultivated in Southern California. Botanical nomenclature for the *Cypripedium* tribe (*Cypripedileae*) was a completely confused mess for approximately 150 years, and, though the matter was firmly and definitely resolved about eighty years ago, the name *Cypripedium* was so identified with anything even remotely resembling a 'lady-slipper orchid' that the name has stuck to this day. It is applied by orchidists and commercial dealers alike to a spectacular group of orchids closely related to the *Cypripediums*, but readily distinguishable from them. It is this group, correctly called *Paphiopedilum*, which is commonly seen in orchid collections and shows.

The story of this confusion dates back to the year 1753 and reads like the Comedy of Errors. In that year Linnaeus, the founder of modern botany, named and described certain plants of Central Europe and the Mediterranean as *Cypripediums*. The plants on which the genus was founded were primarily hardy terrestrials, temperate or sub-tropical in distribution, possessed a plicate leaf structure and a one-celled ovary within the flower. Linnaeus took his name, with a certain amount of allowable poetic license, from the Greek 'Kypris-Podion,' literally 'a little foot of Venus.' His description and classifications were accurate and they still stand as written, as does the name he coined.

During the next hundred years additional botanical material was brought into Europe which closely resembled the *Cypripediums* in flower or leaf structure or both. These were commonly

called *Cypripediums* until the great German botanist Reichenbach founded a new genus within the tribe which separated out from the original group these species similar to the *Cypripediums* in flower except for the three-celled ovary. To this group he gave the name *Selenipedium*. For the next thirty years all was quiet on the "lady-slipper front," then in 1886 another great botanist named Pfitzer set up a third genus to encompass the tropical species with conduplicate leaves. To this genus he assigned the name *Paphiopedilum*, and it is this group of species with their hybrids that are commonly seen today. Pfitzer also moved species formerly in *Selenipedium* but having duplicate leaves and a rolled in margin to the pouch of the flower to a new section called *Phragmopedilum*. It is interesting to note in this connection that Dr. Pfitzer used as a base for the suffix on his new genus the Greek 'podilon' meaning slipper. Only 10 years passed before still another botanist got into the act. The year 1896 brought forth a study by R.A. Rolfe in which he retained the three previous genera and established a new genus to take in the *Phragmopedilum* section of Dr. Pfitzer. Dr. Rolfe felt, too, that it would be logical to end all four established genera in the same suffix. Accordingly, he changed Pfitzer's *Paphiopedilum* to *Paphiopedium*.

It might be conjectured here that Dr. Pfitzer was somewhat piqued at having his work altered. In any case, he set to work and compiled the first extensive monograph on the *Cypripedileae*. In this monograph he accepted the four genera established, but he apparently was sold on the 'slipper' suffix, for he maintained the four genera under the names *Cypripedium*, *Selenipedium*, *Paphiopedilum* and *Phragmopedilum*. Dr. Pfitzer, like Dr. Rolfe before him, must have been aware that under sound principles of botanical nomenclature the earliest given name for a genus must stand. With these principles in mind therefore, the confusion resolves itself as follows: CYPRIPEDIUM (Linnaeus—1753)

Fifty species spread over temperate and tropical zones of the old and new world. Primarily hardy terrestrials. Distinguished by plicate leaves and one-celled ovary.

SELENIPEDIUM (Reichenbach—1854)

Three species, all South American. Distinguished by plicate leaves and three-celled ovary.

PAPHIOPEDILUM (Pfitzer—1886)

Fifty species from tropical Asia, Malayan Archipelago, Indonesia and the Philippines. Have duplicate leaves and a one-celled ovary.

PHRAGMIPEDIUM (Rolfe—1896)

Twelve species, all South American. Margin of pouch on flower rolls inward. Duplicate leaves and a three-celled ovary.

It is this third group which we grow in our gardens and greenhouses and know familiarly as 'Cyps.' We call them by an incorrect name, but this has been going on for one hundred or so years and, since I prefer to be understood rather than to be correct, I shall refer to them as *Cypripediums* in this article.

The Cyps are becoming increasingly popular in the orchid world, and deservedly so. Species have always been found in the larger collections, but it is only within the last twenty years that the large flowered, showy hybrids have become available in quantity at reasonable prices. They are not easy to hybridize and even when a seed pod hangs on for its full nine to eleven months there is often little or no viable seed. The pollen does not keep, as does the pollen of most other orchids, therefore it is almost a necessity to achieve mating while plants are in flower. To add to these difficulties, the Cyps seem to be completely mixed up in their genetic make-up. Twenty-six chromosomes per reproductive cell is the standard diploid number, yet many Cyps vary with up to 39. When crossed with species having an uneven number of chromosomes, or with triploid or tetraploid parents, a mismating of the chromosomes generally occurs. The end result is sterility with no seed; partial sterility with a small amount of seed which germinates poorly, or seedlings which in themselves grow and bloom quite freely but will not hybridize. It is no wonder then, that the hybridizing of Cyps is a specialty unto itself. With the increasing knowledge of genetics, and

especially the recent techniques of chromosome counting, "planned parenthood" may be expected to eliminate many of the current problems. Within a few years Cyps may be a common garden flower.

If this is to be the case, it behooves us to know something of their culture and a brief botanical description of the genus may be in order here.

PLANT—generally terrestrial with short stout rhizomes, no pseudobulbs, bearing two rows of alternating leaves.

LEAVES—narrow and strap-like, folded down the center, channeled on the upper surface and keeled beneath; green, mottled or tessellated, sometimes stained with dull purple.

INFLORESCENCE—from the base of the leaves, erect, nodding or arched.

SCAPE—frequently hairy, bearing from one to several bracts at the base of the flowers.

FLOWERS—one to several large, showy, waxy, or leathery in texture.

SEPALS—spreading, dorsal sepal free and prominent, ventral sepals fused into one and located behind the lip.

PETALS—free, much more narrow than the sepals, adorned with hairs, spots or warts.

LIP—inflated, slipper-shaped, lateral lobes small and turned inward, inner surfaces usually pubescent.

COLUMN—short and terete, usually covered with erect bristles, bearing two fertile anthers, one on each side behind the stigmatic plant, the third anther modified into a shield-shaped staminode which covers and conceals the column, anthers and stigma.

POLLEN—granulose, usually covered with a sticky fluid.

OVARY—single celled.

Because of the varying natures of the species, generalizations on cultural conditions may be made only in the broadest sense. Basically, they may be divided into two groups: (1) Warm growing types with mottled leaves; (2) cool growing types with solid green leaves. These differences are not absolute, however, primarily due to complex hybridization between the two groups. Both groups will grow quite well with daytime temperatures in the low 80's; the mottled leaf species prefer night temperatures no lower than 55 degrees, while the green-leaved group will tolerate the low

forties. Variation in these suggested temperatures, either to the low or the high side will do no damage with the limitation that such variation must not be continued for long periods of time. The light requirement for all Cyps is among the lowest in the orchid family. Normal cultures should provide 20 to 30 percent full sun, but they will accept deep shade and thrive under those conditions. The only thing to watch for under low light intensity is the inception and spread of bacterial rot or fungus. The plants have no pseudobulbs or water retention mechanism, consequently they must never be allowed to dry out. Watering practices will depend on weather and the environment of the plants, with good common sense being the chief governing factor. Overhead watering is not recommended by the authorities, but I have seen no major damage result where overhead watering is consistently done. In all cases a free movement of air is essential. Stagnant, quiet air is to be avoided, but strong drafts or blasts of heated air are just as bad. Potting mixes for the Cyps are matters of personal preference. A growing medium should be porous, well-drained, moisture retentive without staying soggy, inexpensive, and easy to handle. There are many things that combine all these requirements including leaf mold, shredded bark, osmunda, fibrous loam, and sand, and Cyps are successfully grown in all of these.

Potting is best done immediately after flowering, and plastic pots should be used if possible. Cyps seem to react adversely to the build-up of alkaline salts which is inevitable with the use of Colorado River water. Root tips will reach the edge of a clay pot and promptly burn and the plastic pot seems to be the best answer. Division into smaller plants may be made at the time of repotting, but don't divide too severely. Allow three crowns minimum to a new pot to insure survival. Smaller divisions may be made, but new growths are sturdier and more healthy when there are one or two old growths to support them. Gently shake or twist the plant to determine where to divide. In most cases the Cyp will separate readily at a natural division. Pot with the base of the leaves just at the top of the compost, leaving

no roots exposed. Tamp the mix in thoroughly, but do not pack hard. Old leaves and dead roots should, of course, be removed when repotting. There are two schools of thought regarding the feedings of Cyps. Some growers hold that when grown in an organic type compost no food is required. I can't disagree with this, but I do feed my Cyps the year round on the theory that they are never completely dormant. Perhaps my growing conditions are different, but I find that even while they are in flower they are also pushing out new growths. If there is leaf growth, there must also be root growth, and feeding would seem to me to be indicated. Good judgment dictates a smaller amount of fertilizer through the winter months and I do accept this premise. Perhaps there is sufficient food value in an organic compost, but Cyps grow better and flower more freely for me when I supplement their compost diet.

Nothing has been said here about the blooming habits or seasons of the Cyps, and this cannot be omitted. In size they may range from 2 to 5 inches, and even the small ones are a spectacular show. They frequently have the waxy texture of the Andreanum Anthuriums and some people object to them simply because they look artificial. Keeping qualities, both cut and on the plant are excellent, with an average Cyp holding for four to six weeks. They combine readily with other material and are invariably conversation pieces when used as corsage or flower arrangement bases. Colors run from the whites and creams through yellows, greens, browns, and maroons with every conceivable combination of tints and shades in these colors. They bloom freely and with proper selection of species and hybrids may be kept in bloom for 12 months of the year. Not many other garden plants that can be used also as house plants can boast as much. They take up little space and give a great reward for minimum care as a growing number of Cyp enthusiasts can attest. Won't you join us? Try one or two, but leave room for more. You'll want them. □



DIGNITY AND BEAUTY

by ADRIENNE GREEN

Photos by Betty Mackintosh



MRS. BENJAMIN BERRY of Coronado, features camellias in this formally balanced arrangement of green and white. Calla lilies, snap dragons, ranunculus, and daisies are the other flowers used in this handsome alabaster urn.



CLIVIA, also known as the Kaffir lily, thrives outdoors in Southern California gardens. This handsome member of the Amaryllis family is striking in flower arrangements. Only a couple of spikes of New Zealand flax for height are used with the orange flowers and their dark green leaves. The original ceramic container is by Trudy Toulis.



POISONOUS PLANTS

Information provided by the Poison Information Center

POISON CENTER 294-6000

HOUSE PLANTS

Plant	Toxic Part	Symptoms and Comment
Castor bean	Seeds	Burning sensation in mouth and throat. Two to four beans may cause death. Eight usually lethal. Death has occurred in U.S.
Dieffenbachia (dumbcane), caladium, elephant's ear, some philodendrons	All parts	Intense burning and irritation of mouth, tongue, lips. Death from dieffenbachia has occurred when tissues at back of tongue swelled and blocked air passage to throat. Other plants have similar but less toxic characteristics.
Hyacinth, narcissus, daffodil	Bulbs	Digestive upset including nausea, vomiting and diarrhea when eaten even in small amounts.
Rosary pea (jequirity bean, crabs-eye, precatory bean)	Seeds	Among the most highly toxic of natural materials. Severe gastrointestinal irritation, incoordination, paralysis. Less than one seed, if thoroughly chewed, is enough to kill an adult.

FLOWER GARDEN PLANTS

Aconite, monkshood	Roots, flowers, leaves	Restlessness, salivation, nausea, vomiting, vertigo. Although people have died after eating small amounts of garden aconite, poisoning from it is not common.
Autumn crocus	All parts, especially bulbs	Burning pain in mouth, gastrointestinal irritation. Children have been poisoned by eating flowers.
Dutchman's breeches (bleeding heart)	Foliage, roots	No human poisonings or deaths, but a record of toxicity for livestock is warning that garden species may be dangerous.
Foxglove	All parts, especially leaves, flowers, seeds	One of the sources of the drug digitalis. May cause dangerously irregular heartbeat, digestive upset and mental confusion. Convulsions and death are possible.
Iris	Underground rhizome, also developed leaves	Severe digestive upset from moderate amounts of cultivated or wild irises. However, acidity usually prevents large consumption. Boiled properly, wild stems may be eaten.
Larkspur, delphinium	Seeds, young plant	Livestock losses are second only to locoweed in western U.S. Therefore, garden larkspur should at least be held suspect.
Lily-of-the-valley	Leaves, flowers, fruit (red berries)	Produces glycoside like digitalis, used in medicine to strengthen the beat of a weakened heart. In moderate amounts, can cause irregular heartbeat, digestive upset and mental confusion.
Nicotiana, wild and cultivated	Leaves	Nervous symptoms. Poisonous or lethal amounts can be obtained from ingestion of cured smoking or chewing tobacco, from foliage of field-grown tobacco or from foliage of garden variety (flowering tobacco or nicotiana).

Plant	Toxic Part	Symptoms and Comment
VEGETABLE GARDEN PLANTS		
Potato	Vines, sprouts (green parts), spoiled tubers	Death has occurred from eating green parts. To prevent poisoning from sun-burned tubers, green spots should be removed before cooking. Discard spoiled potatoes.
Rhubarb	Leaf blade	Several deaths from eating raw or cooked leaves. Abdominal pains, vomiting and convulsions a few hours after ingestion. Without treatment, death or permanent kidney damage may occur.
ORNAMENTAL PLANTS		
Atropa belladonna	All parts, especially black berries	Fever, rapid heartbeat, dilation of pupils, skin flushed, hot and dry. Three berries were fatal to one child.
Carolina jessamine, yellow jessamine	Flowers, leaves	Poisoned children who sucked nectar from flowers. May cause depression followed by death through respiratory failure. Honey from nectar also thought to have caused three deaths.
Common privet	Black or blue wax-coated berries, leaves	Causes gastric irritation and vomiting. Several cases in children reported in Europe.
Daphne	Berries (commonly red, but other colors in various species), bark	A few berries can cause burning or ulceration in digestive tract causing vomiting and diarrhea. Death can result. This plant considered "really dangerous," particularly for children.
English ivy	Berries, leaves	Excitement, difficult breathing and eventually coma. Although no cases reported in U.S., European children have been poisoned.
Golden chain (laburnum)	Seeds, pods, flowers	Excitement, intestinal irritation, severe nausea with convulsions and coma if large quantities are eaten. One or two pods have caused illness in children in Europe.
Heath family (laurels, rhododendron, azaleas)	All parts	Causes salivation, nausea, vomiting and depression. "Tea" made from two ounces of leaves produced human poisoning. More than a small amount can cause death. Delaware Indians used laurel for suicide.
Lantana	Unripe greenish-blue or black berries	Can be lethal to children through muscular weakness and circulatory collapse. Less severe cases experience gastrointestinal irritation.
Oleander	Leaves, branches, nectar of flowers	Extremely poisonous. Affects heart and digestive system. Has caused death even from meat roasted on its branches. A few leaves can kill a human being.
Wisteria	Seeds, pods	Pods look like pea pods. One or two seeds may cause mild to severe gastrointestinal disturbances requiring hospitalization. However, with treatment recovery occurs in 24 hours. No fatalities recorded. Flowers may be dipped in batter and fried.
Yew	Needles, bark, seeds	Ingestion of English or Japanese yew foliage may cause sudden death as alkaloid weakens and eventually stops heart. If less is eaten, may be trembling and difficulty in breathing. Red pulpy berry is little toxic, if at all, but same may not be true of small black seeds in it.

TREES AND SHRUBS

Plant	Toxic Part	Symptoms and Comment
Apple	Seeds	If eaten in large quantity, can cause death. One man died after eating a cupful.
Black locust	Bark, foliage, young twigs, seeds	Digestive upset has occurred from ingestion of the soft bark. Seeds may also be toxic to children. Flowers may be fried as fritters.
Buckeye, horsechestnut	Sprouts, nuts	Digestive upset and nervous symptoms (confusion, etc.). Have killed children but because of unpleasant taste are not usually consumed in quantity necessary to produce symptoms.
Chinaberry tree	Berries	Nausea, vomiting, excitement or depression, symptoms of suffocation if eaten in quantity. Loss of life to children has been reported.
Elderberry	Roots, stems	Children have been poisoned by eating roots or using pithy stems as blowguns. Berries are least toxic part but may cause nausea if too many are eaten raw. Proper cooking destroys toxic principle.
Jatropha (purge nut, curcas bean, peregrina, psychic nut)	Seeds, oil	Nausea, violent vomiting, abdominal pain. Three seeds caused severe symptoms in one person. However, in others as many as 50 have resulted in relatively mild symptoms.
Oaks	All parts	Eating large quantities of any raw part, including acorns, may cause slow damage to kidneys. However, a few acorns probably have little effect. Tannin may be removed by boiling or roasting, making edible.
Wild black cherry, chokecherries	Leaves, pits	Poisoning and death have occurred in children who ate large amounts of berries without removing stones. Pits or seeds, foliage and bark contain HCN (prussic acid or cyanide). Others to beware of: several wild and cultivated cherries, peach, apricot and some almonds. But pits and leaves usually not eaten in enough quantity to do serious harm.
Yellow oleander (be-still tree)	All parts, especially kernels of the fruit	In Oahu, Hawaii, still rated as most frequent source of serious or lethal poisoning in man. One or two fruits may be fatal. Symptoms similar to fatal digitalis poisoning.

PLANTS IN WOODED AREAS

Baneberry (doll's-eyes)	Red or white berries, roots, foliage	Acute stomach cramps, headache, vomiting, dizziness, delirium. Although no loss of life in U.S., European children have died after ingesting berries.
Jack-in-the-pulpit, skunk cabbage	All parts, especially roots	Contains small needle-like crystals of calcium oxalate that cause burning and severe irritation of mouth and tongue.
Mayapple (mandrake)	Roots, foliage, unripe fruit	Large doses may cause gastroenteritis and vomiting. Ripe fruit is least toxic part and has been eaten by children—occasionally catharsis results. Cooked mayapples can be made into marmalade.



Oleander

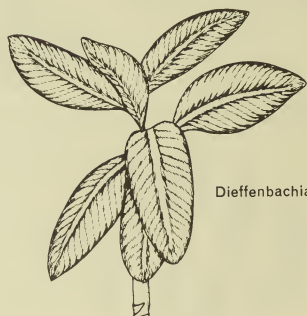
Plant	Toxic Part	Symptoms and Comment
Water hemlock (cowbane, snakeroot)	Roots, young foliage	Salivation, tremors, delirium, violent convulsions. One mouthful of root may kill a man. Many persons, especially children, have died in U.S. after eating this plant. Roots are mistaken for wild parsnip or artichoke.

PLANTS IN FIELDS

Death camas	Bulbs	Depression, digestive upset, abdominal pain, vomiting, diarrhea. American Indians and early settlers were killed when they mistook it for edible bulbs. Occasional cases still occur. One case of poisoning from flower reported.
Jimsonweed (thornapple)	All parts, especially seeds and leaves	Thirst, hyper-irritability of nervous system, disturbed vision, delirium. Four to five grams of crude leaf or seed approximates fatal dose for a child. Poisonings have occurred from sucking nectar from tube of flower or eating fruits containing poisonous seeds.
Nightshades, European bittersweet, horse nettle	All parts, especially unripe berry	Children have been poisoned by ingesting a moderate amount of unripe berries. Digestive upset, stupefaction and loss of sensation. Death due to paralysis can occur. Ripe berries, however, are much less toxic.
Poison hemlock	Root, foliage, seeds	Root resembles wild carrot. Seeds have been mistaken for anise. Causes gradual weakening of muscular power and death from paralysis of lungs. Caused Socrates' death.
Pokeweed (pigeonberry)	Roots, berries, foliage	Burning sensation in mouth and throat, digestive upset and cramps. Seeds thought to have caused one human fatality.

CHRISTMAS PLANTS

Holly	Berries	No cases reported in North America, but thought that large quantities may cause digestive upset.
Jerusalem cherry	Unripe fruit, leaves, flowers	No cases reported, but thought to cause vomiting and diarrhea. However, when cooked, some species used for jellies and preserves.
Mistletoe	Berries	Can cause acute stomach and intestinal irritation. Cattle have been killed by eating wild mistletoe. People have died from "tea" of berries.
Poinsettia	Leaves, flower	Can be irritating to mouth and stomach, sometimes causing vomiting and nausea, but usually produces no ill effects.



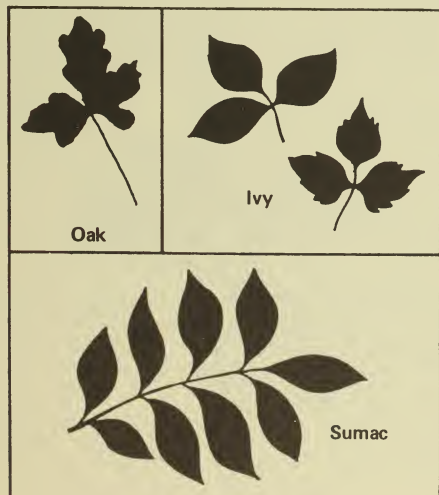
Dieffenbachia

..... Some Additional Information

Poison ivy, oak and sumac—pretty, poisonous plants. The skin rash some people develop when they come into contact with the sap of poison ivy, oak or sumac is called allergic contact dermatitis. You can be exposed to it once and develop an allergic tendency, or it may take repeated exposure for skin cells to become sensitized. Once the skin is sensitized, whenever you come into contact with the sap again, you will break out in a rash. Not all people develop allergies to these plants, and sensitivity varies among individuals. If you are one of the unfortunate ones, find out how to protect yourself.

The best prevention is avoidance, so learn to recognize these plants. Poison ivy and oak always have three leaves; sumac has anywhere from seven to thirteen leaves, and has clusters of white berries. You don't have to actually touch the plants to develop a rash; the sap can be carried by clothes, tools, pets and even in smoke from the burning plants.

If you are exposed to any of these plants, remember that serum from existing rashes doesn't spread the rash. If your rash spreads, it is because some sap has remained on your skin, or you have been re-exposed. Initially, the rash is red and itchy and later blistering may occur.



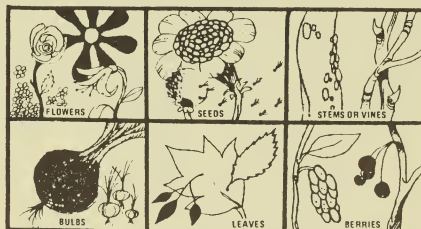
TREATMENT FOR POISON OAK, POISON IVY,
OR POISON SUMAC

1. Wash all exposed surfaces with soap and water.
2. Wash all clothes, shoes, belts, bedding, and animals exposed.
3. Do not use calamine lotion over area.
4. Use wet soaks with tepid water for 20 to 30 minutes, every 2 hours.
5. Baking soda paste may cut down on the itching.
6. If case is severe, see your physician, who may use steroids.

SOME DO's AND DON'T's TO REMEMBER

1. Never eat any part of an unknown plant.
2. Eat only properly prepared foods from well-known sources.
3. Never chew on jewelry made from imported seeds or beans.
4. Never use anything prepared from nature as a medicine or "tea."

Since any plant is a potential poison, if you or your children should accidentally ingest any part of a plant, always call the Poison Information Center at 294-6000. No one should be prevented from enjoying the beauty provided by nature's plants, fruits, and flowers. But, every one of us must learn to appreciate this bounty with due respect and common sense. It may save a life.



ANY PART OF A PLANT CAN BE TOXIC

ROSES IN SAN DIEGO

by REES GOULD

Rees Gould, a native of San Diego County, is continuing the family tradition of growing prize winning roses.

SO MANY articles have been written concerning rose growing in this area that it is unnecessary for me to go into too much detail. So I think all that is really needed is a review of the essentials of rose culture.

San Diego County offers one of the best and most varied growing areas in California. Best, in that exhibition quality roses can be grown in just about any spot an interested gardener can spade the ground. Varied because of the wide variation in both soil and climatic conditions found in many other areas of the United States.

Basic rules for growing beautiful roses are simple, but you must be consistent. They work better if you follow a regular schedule. They include water, food, spray, and a genuine love of fine flowers.

Water—lots of it.

Spray—don't overdo and only spray for specific problems.

Prune—be courageous and remember they like it.

Fertilize—always on a schedule.

Whether you use overhead sprinklers, a drip line, bucket, or garden hose for watering, give your roses a regular and ample supply of water. Check with a moisture meter or dig with a trowel to determine if the soil is moist. If the soil appears to be dry, irrigate deeply—do not irrigate again until tests show that it is becoming dry. After testing the soil several times, the schedule for irrigation will become evident. The use of a mulch of 3 to 4 inches of organic material will greatly reduce the frequency of irrigation. Remember, if that hot, dry Santa Ana wind is blowing you will have to water more often.

Drainage is as important as watering. In some soils water may drain away too fast. To avoid constant watering, and with a serious water shortage looming, it is much wiser to mix in liberal quantities of moisture retaining amendments to the soil, such as peat moss or redwood shavings.

In heavy soils water may not drain away and that can cause root damage. Drainage can be improved by mixing in agricultural gypsum, vermiculite, sponge-rock, or coarse organic material. Otherwise, raise the rose bed from 6 to 12 inches and prepare the soil for good drainage.

Powdery mildew and rust—that orange spore under the rose leaf, are best controlled by dormant spraying after the winter pruning and a continued program of spraying with fungicide every 2 to 3 weeks or as necessary to control. Mildew and rust lead to general deterioration of the entire bush and ruin many stems and blossoms. Overhead water or using a sprinkler system early in the day so the leaves will dry will reduce the frequency of chemical spraying. Consistent spraying with water, especially the underside of the leaves, washes away the spores of mildew and rust and insects and their eggs. Most rose pests simply do not like water.

The most common insect pests of roses are aphids, spider mites, and thrips. Aphids can be washed off with water, but return rapidly. They are best controlled with one of the systemic insecticides sprayed onto the foliage or included with your fertilizer. One word of caution, though, when spraying—remember new growth burns easily. Reduced strength is advised for the first spraying. Of course, you should always water your bushes before spraying of any kind. Systemic insecticides control most of the sucking insects. Thrips are a very small sucking insect which attacks the foliage, the rose bud as it opens, or the full blossom. A control for thrip is a misting (spraying) with Cygon 2-E spray. Spider mites are especially difficult to exterminate. A variety of sprays have been tried: Diazinon, Isotox, Kelthane, and Plictran. Since Plictran is not readily available, your best bet is to start with one of the others and repeat the spraying every 5 to 7 days. The important thing to remember is to apply the necessary control before the infestation becomes serious.

Continued on Page 62

THE ACACIA SEASON

by K. O. SESSIONS

NOVEMBER TO February being its season, *Acacia podalyriaefolia* has finished its bloom and is setting its seed pods and looking quite shabby. The remedy is to prune it once, cutting it back from 1 to 3 feet all over the tree depending on age and size of the plant. At once new growth begins and soon all is in fine fresh foliage and by summer is full of buds for the next season's flowers. All acacias hold their buds dormant for a long time.

By February *Acacia baileyana* is showing its great yellow plumes and always on the north side of the tree first. Its beauty lasts for 2 to 2½ months, then its seed pods begin to form. The same remedy follows, cutting back 3 to even 5 feet all of the branches, depending on the size of the tree. Every acacia variety needs the same treatment, a heavy pruning directly following the blossoming season each year.

There are a few summer bloomers, also fall, and one ever-bloomer, *Acacia floribunda*. It should be pruned in the late fall so it will make its new growth during the winter while the many other varieties are in bloom.

This variety is a small grower and flourishes near the coast but not by the shore. That position will do well for *Acacia latifolia* which is a strong growing shrub—stands heavy pruning and makes an excellent large hedge, placing the young plants 6 to 10 feet apart. Such a hedge makes a good shelter for gardens near the coast. *Acacia pruinosa* is a large grower and fall bloomer, its fern-like foliage with brown tints being very beautiful.

Acacia prominens is a very tall grower and its main and central stem is like a large telephone pole. The foliage is a simple leaf, flowers rather light yellow and choice. Its fine erect and rapid growth makes it a desirable variety for a new garden to be placed in the background.

Small growing acacias are each year more in demand, and *Acacia linearis*, *A. lineata*, and *A. decora* are all excellent. *A. decora* grows only about 3 feet high, a choice and dainty small shrub.

The blackwood acacia, commonly planted on streets, is *A. melanoxylon*. At this time they are full of seed pods and need a heavy pruning all over.

Every acacia needs a good stake when planted and placed on the leeward side so the tree will lean against it; and the branches should grow longer on the windward side, and help to hold the tree and main central stem erect. All kinds of seedling trees will grow erect without staking because by nature their branches grow longer into the wind and their extra weight holds the main stem and tree erect. A small plant with a straight central stem can be made to grow erect by nipping the tip ends off on all branches on the leeward side. All larger growing trees should be planted when very small for best results. □

Poinsettia Pointers

The poinsettia plants that are well established close to the house, wall or lot line can be improved by planting an irregular group or a row of *Myrtus communis* or *coprosma* plants in front, set out at least 2 to 3 feet and 3 or more feet apart. These shrubs stand trimming well as they grow and they will hide the bare stems and heavy trunks of the old poinsettia plants trimmed back in February and looking bare until June.

If new poinsettia plants are being planted, place them at the back of good evergreen shrubs—but allow for ample root development. Old plants have many branches, so some thinning out and transplanting in March will give excellent results.

A generous planting of your own cuttings in the rear yard or garden will give an abundance of flowers for cutting and save those in the front as long as the season lasts. Everyone enjoys using this flower generously—so grow them more abundantly each year.

—K. O. Sessions.

GROWING AFRICAN VIOLETS

by FRANCES KING

Frances King is a Judge and Life Member of the African Violet Society of America.

GROWING AFRICAN VIOLETS has given some of us such joy and pleasure that we tend to imagine that everyone grows them. Indeed, we do see them in homes, offices, libraries, and even factories. It is not only the ladies of the household but men and teenagers as well who are growing African violets and have caused them to become the favorite house plant.

Besides the natural appeal for the lovely African violets, its popularity is undoubtedly due to its almost constant blooming habit, relative ease of culture, and its adaptability to our average indoor conditions.

In less than fifty years the hybridizers have made great improvements on the African violet plant with its original small single, violet-shaped blossom. Today we have singles, semi-doubles, and doubles; and blossoms that are star shaped, fringed, and fluted. Plants producing as many as twenty flowers per cluster are available. Blossom size is three inches in diameter on some plants. The blossom colors range from orchid to purple, pink to almost red, and white to ivory. The beautiful new corals are exciting. Many of the flowers are two-toned or multi-colored or edged in white or a contrasting color. The foliage types are numerous—scalloped, fringed, holly, spooned, and even bustle-backed.

African violets can be grown successfully if a few cultural conditions are met. Start with single crowned plants and provide them with the proper potting mix and proper size pot, proper watering and fertilizing, proper light, temperature and humidity.

Potting Mix and Pots. There are many good pest- and disease-free potting mixes available on the market made especially for African violets. The mix should be light, fluffy, and very porous—not at all like back yard soil. Additional coarse Sponge Rok may be added to insure good drainage and adequate oxygen to reach the roots. African

violets are shallow rooted so a short pot is preferred. The rule of thumb for selecting a pot size is that the pot should be one one-third the diameter of the plant. Thus, a 9-inch plant would be in a 3-inch pot and a 12-inch diameter plant in a 4-inch pot.

Watering and Fertilizing. A plant potted in a proper mix should be watered with warm water thoroughly and not again until the top of the soil looks light brown or the pot is light in weight. Try to keep the plant moist at all times—never dry and never wet. Remember that overwatering means watering too often, not too much. For ease of fertilizing, mix one quarter strength fertilizer and use to water and feed at the same time—every time you water.

Light. Adequate light must be provided for plants to bloom. Avoid direct sunlight but keep plants as close to the window as possible. If you do not have good natural light, use fluorescent lights. The light source should be from above. If a plant is placed on a white surface, the reflect light will tend to draw the leaves down in an unnatural manner.

Temperature. Fortunately, the violets like the same temperatures that we do—60's at night and 70's in the day time. If temperatures go below 60 degrees or above 80 degrees, the plant will slow down and there will be sparse flowers.

Humidity. Maintain 40-to-50 percent humidity in the area around the plants. Plants will benefit by being placed on saucers over trays of moist gravel. Humidity can also be increased by misting the air above the plants with warm water. Lack of bloom may well be attributed to hot, dry air. Fresh air is essential to healthy blooming plants.

By following these suggestions anyone should have pleasing results growing African violets. One should be aware that the contagious disease known as violetitis is easy to contract and there is no cure—just enjoy it. □

EPIPHYLLUMS

by WARREN E. KELLY

This article is taken in part from material appearing in the catalog of KELLY'S EPIPHYLLUM COLLECTION and is published with permission of the authors, Warren and Mary Kelly.

EPIPHYLLUMS SHARE two things in common with orchids—their epiphytic growth and the exquisite beauty of their flowers. Beyond that, the relationship ends. The epiphyllum is a cactus that never left the jungle, something that is true of more than half of all known cacti. The desert dwellers are simply nature's adaptations of those which no longer had the humidity and filtered sunlight provided by the jungle.

To the plant hobbyist whose interest has centered on epiphyllums, there is no blossom that can match those of the countless hybrids in perfection and in the varieties of color, form, and size. If you doubt that, go to one of the spring epiphyllum shows. The bewildering number of named varieties on exhibit will be but a fraction of the more than 5,000 registered hybrids on record with the National Society headquartered in Los Angeles.

Interestingly, epiphyllum hybrids are not true hybrids, being crosses of different varieties of plants—not plants of the same family. The flowers of the wild epiphyllums found in the rain forests of Mexico, the West Indies, and Central and South America are primarily white, mostly night blooming, and range in size from the tiny *Epiphyllum pittieri* to the spectacular *E. oxypetalum*.

Attention to the species has been on the increase in recent years, not so much for their flowers as for their interesting foliage. Among the night-blooming species are *E. strictum* (illustrated) found in so many collections and the *Anguliger* group (commonly referred to as "ric-rac") which has the most unusual plant growth.

Epiphyllum branches, which were originally—and erroneously—referred to as leaves, are flat and scoloped, yet vary widely in form. There still remains much confusion in the identification of species. It is highly probable that many species exist which are still awaiting discovery and proper

classification. At present, the number of known species seems to be around twenty, including both night and day-blooming varieties, the latter being quite fragrant. The day bloomers, particularly *E. crenatum*, were crossed early in the 19th century with such distant relatives as *Heliocereus* and *Selenicereus* to produce the fantastically colorful hybrids we refer to today as "orchids of the cactus family."

Over the years, the number of hybrids has mounted incredibly. Although epiphyllums, like all other cacti, are native to the Americas, the first hybridizing of the species was done in Europe nearly a century and a half ago and not taken up in this country until the 1920's.

Two major wars and the displacement of people resulted in the loss of many hybrids and the complete disruption of record keeping. Thus, there are undoubtedly countless duplications, hybrids of unknown parentage, and varieties still found in some listings which have long ceased to exist. Much work has been done in recent years to bring order out of confusion, and considerably greater attention is being given to recording the data needed to assure a reliable list of registered hybrids.

Although this is "the season" to enjoy the unbelievable beauty of epiphyllum hybrids in the splendor of their blooms, large collections always seem to have something in bloom. These may range from massive blossoms as much as 10 inches across to a profusion of small, jewel-like flowers on some of the newer hanging basket varieties. Since epiphyllums do so well in our mild climate while thriving even where living and growing space is limited, at least a few of these exotic hybrids belong in everyone's accumulation of house plants. A visit to the spring shows or to any one of the nurseries specializing in epiphyllums will convince you. □

PHOTOS ON OPPOSITE PAGE:

—Top *E. strictum*

—Bottom *E. oxypetalum*



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BOOK OF VEGETABLE GARDENING, by Joan Lee Faust, photos by Almqvist and Herman Gantnet, illustrations by Allianora Rosse, Quadrangle, The New York Times Book Co., 10 East 53rd Street, N.Y. 10022, 282 pages, \$9.95.

Since growing vegetables is in vogue now, books on how to grow them are so numerous one hardly knows which one to buy. If you live in the north temperate zone, this is a good one, and the general information is good anywhere. This book is an encyclopedia on how to grow vegetables. No process in preparation of soil, planting and cultivation both indoors and out is omitted. Each vegetable is attractively illustrated in color. It is a handy reference book to keep around to find answers to any question. Ms. Faust, a horticultural graduate of Michigan State University, is the garden editor for the New York Times.

THE POSTAGE STAMP GARDENING BOOK, by Duane G. Newcomb, illustrated by Barbara Brody, J.P. Tarcher, 9119 Sunset Blvd., Los Angeles, CA, 90069, \$4.95, (paperback).

Another vegetable growers book more for our Southern California climate, and restricted to small spaces, pots, raised beds and boxes. Mr. Newcomb has degrees in botany and forestry, but he makes the ordinary gardener feel equal by admitting that these sciences did not fit him for being a good vegetable gardener. He first went to books, but decided the successes of the French and Swiss organic gardeners had what he needed. He dug up his back yard and made it so rich with organic materials, sowed his seeds informally, and in time reaped an abundance of vegetables. He goes into all phases of vegetable gardening in very small spaces and makes one feel that anyone can raise much even in a 4' by 4' space. His manner is informal, his language conversational, and his enthusiasm is inspiring and catching.

—Rosalie Garcia

TREES AND SHRUBS FOR PACIFIC NORTHWEST GARDENS, John A. Grant and Carol L. Grant, Pacific Books Publishers, Palo Alto, CA, 335 pages.

Here is an excellent book for gardeners in the California area to own. The area covered includes northwestern California, up the coast to British Columbia. It is a regional book that gives a comprehensive overall guide to gardening in this particular climate and included in it are lists of trees and shrubs that are available in nurseries in this country and in Canada, which are hardy or semi-hardy and have proven themselves.

ECHEVERIAS, A GUIDE TO CULTIVATION AND IDENTIFICATION OF THE POPULAR AMERICAN SUCCULENTS, L. Carruthers and R. Ginns, Arco Publishing Co., Inc., N.Y., 100 pages, 1973, \$7.95.

Here is a book that Southern Californians should have in their library. Echeverias, those easy to grow succulents, are traded and passed around in this part of the country as often as geraniums. Too often they are not identified. This book covers them in layman's language and provides beautiful color photographs for easy identification. It is an excellent introduction to echeverias, written in easy to read type and language.

A FLORA OF SOUTHERN CALIFORNIA, Philip A. Munz, University of California Press, Berkeley, Ca, 1974, 1086 pages.

This is a book for the erudite horticulturist. It deals with the area designated as Southern California from Point Conception to the southern tip, including the islands off the coast. There are 15 plant communities which are covered in detail beginning with Coastal Strand, Coastal Salt Marsh, Freshwater Marsh, Coastal Sage Scrub and continuing through the mountainous regions to the Alkali Sink. For the serious collector and gardener, for the educated and knowledgeable botanist, this book is an invaluable tool.

DESERT PLANTS FOR DESERT GARDENS,
by Patricia Moorten and Rex Nevins, 113 pages,
(paperback).

This is mostly a picture book of desert plants in landscaped uses. Mrs. Moorten is the Director of the Moorten Botanical Garden on the original Indian trail to Palm Canyon at Palm Springs, California. There are 98 photographs of desert shrubs, trees, cacti and succulents with descriptions of each. Although all are desert plants, weekly watering is recommended for all. Many will grow in our Coastal and "back country" valleys. Mr. Nevins is a journalist and photographer who helped with the book.

THE JOY OF A HOME FRUIT GARDEN, by
Margaret Tipton Wheatley, Doubleday & Co.,
Inc., Garden City, N.Y., 1975, 146 pages.

Mrs. Wheatley has lived in the San Diego area and taught gardening classes. She dedicates this book to our Kate Sessions from whom she says she learned "to sow, to grow and to value the joy of harvest" whether it was a tasty salad, a beautiful flower, or a luscious fruit. In this small book she concentrates on growing the "luscious fruit" in a small space, and how to choose dwarf trees both stone and citrus fruits, berries, grapes and sub-tropicals. Emphasis on landscaping to make the little orchard fit in with the limitations of small spaces is a great part of the planning. Pruning, fertilizing, pest control, and especially watering are all covered.

— Stuart Macdonald

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- ✓ to start new plants from cuttings, leaves or seeds.
- ✓ to start in March your tuberous begonias in sprouting medium—moistened leaf mold and sand; keep barely moist and in warm place. Pot those started earlier if ready, using 9 inch pot.
- ✓ to protect roots of plants with a mulch.
- ✓ to clean all pots and plantings of dead wood, leaves, and old blooms.
- ✓ to cut back plants when new growth appears; don't prune more than 1/3 of the plant at one time to avoid shock.
- ✓ to start feeding—give 1/4 strength of any good all-purpose plant food if feeding once a week; 1/2 strength if feeding twice a month or full strength if once a month.
- ✓ to keep up a watering program if there are no rains. Plants should be moist but not wet.

BONSAI

DR. HERBERT MARKOWITZ

- ✓ to watch watering program if no rains.
- ✓ to repot plants; shape to conform with the container.
- ✓ to remember deciduous flowering plants need repotting every year (except quince). Conifers may go 3 to 5 years.
- ✓ to graft deciduous plants.
- ✓ to add small amounts of chelated iron or acidifying preparations to correct alkaline salts buildup.

CACTUS AND SUCCULENTS

VERNA PASEK

- ✓ to start watering and fertilizing as new growth appears.
- ✓ to protect delicate succulents from aphids which have been more evident this year especially on echeverias, crassulas, and aeoniums. Rubbing alcohol (diluted or full strength) applied with a Q-tip will help eliminate the infestation if it is not too heavy.
- ✓ to propagate by division or cuttings. Protect from sun and drafts after surgery. Do not overwater.
- ✓ to move cactus and succulents which are showing signs of over crowding. Some send out roots several feet making it necessary to

root-prune before removing, to save up-rooting smaller plants.

- ✓ to identify unmarked mammalarias by their blooms.

CAMELLIAS

BENJAMIN BERRY

- ✓ to maintain a regular watering program.
- ✓ to transplant those plants not done last month.
- ✓ to use only 1/3 strength fertilizer if needed now.
- ✓ to protect late blooming varieties from hot sun as much as possible.
- ✓ to maintain a regular spray program and dust with chlorodane under and around plants to discourage leaf beetle.
- ✓ to remember not to fertilize a newly transplanted bush; but you can water well and use a vitamin B-1 solution.
- ✓ to feed iron every other month to promote a healthy deep green.

DAHLIAS

ABE JANZEN

- ✓ to remove tubers from storage and place in sprouting medium—use vermiculite, sand, or other starting material. Place in a warm location to sprout, but take care with moisture.
- ✓ to prepare planting area by broadcasting 2½ pounds of super-phosphate and 2½ pounds sulphate of potash for each 100 square feet of ground. Fork in and level ground.
- ✓ to drive stakes in planting location—plant tuber in front or back of stake.
- ✓ to plant sprouted tuber after two or three weeks—dig hole 6 inches deep, mix in bone meal, then place tuber on its side with sprout up and two inches from stake. Cover with two inches of soil, moisten, but do not keep wet.
- ✓ to protect from snails.

EPIPHYLLUMS

MARY & WARREN KELLY

- ✓ to let spring rains leech out salts that have accumulated in pots.
- ✓ to keep plants in filtered sunlight to develop buds.
- ✓ to check newly formed buds for flowering space. Pinch off some buds of young plants so

that energy can go into new growth. Some bud drop is normal.

- ✓ to refrain from moving plants while buds are forming.
- ✓ to check for pests—aphids, mealybug, scale. Spray with malathion as needed.
- ✓ to put out snail bait. Keep from contact with plants.

FERNS

RAY SODOMKA

- ✓ to spray for aphids and scale.
- ✓ to remove all dead fronds.
- ✓ to fertilize with high nitrogen liquid or pellets.
- ✓ to divide, repot, or add leaf mold or equivalent.
- ✓ to water and keep surrounding areas damp to help maintain humidity.
- ✓ to plant spore.

FUCHSIAS

WILLIAM SELBY

- ✓ to make last effort to prune and shape your fuchsias.
- ✓ to continue taking cuttings.
- ✓ to pinch those plants that have grown enough from your early pruning. Continue pinching as soon as three pairs of leaves appear.
- ✓ to use high nitrogen fertilizer when new growth has formed.
- ✓ to keep a close watch for whitefly and/or inch worms. Use Malathion 50 at first sign of infestation.

GERANIUMS

PHIL BUSH

- ✓ to cut back the zonals.
- ✓ to start feeding lightly but very regularly.
- ✓ to water sparingly.
- ✓ to pinch plants to force outside leaves.
- ✓ to spray for whitefly and aphids—use Malathion.
- ✓ to check potted plants for repotting needs—move to next size larger pot.
- ✓ to clean plants of dead leaves and blossoms.

IRIS

SOCIETY

- ✓ to fertilize with low-nitrogen all-purpose or liquid fish fertilizer.
- ✓ to keep weeds under control.
- ✓ to water regularly.
- ✓ to use systemic spray to control aphids and thrips.
- ✓ to give Japanese and Louisiana types acid food in the water—can use camellia type fertilizer.

ORCHIDS

LOIS DONAHUE

- ✓ to move cymbidiums into shaded areas to pro-

tect color.

- ✓ to give cypripediums more shade.
- ✓ to give seedlings all possible light without burning.
- ✓ to continue low nitrogen fertilizer for cymbidiums.
- ✓ to keep clean—keep dead leaves and sheaths cleared off.
- ✓ to check which cymbidiums need dividing and/or repotting.
- ✓ to check slug and snail control—do not use any arsenic bait.
- ✓ to repot outdoor cypripediums after blooming.

ROSES

DEE THORSON

- ✓ to supply plenty of water for rapidly growing bushes.
- ✓ to fertilize with a liquid rose food or foliar feed with "Rapid Grow" or "Miracle Grow," if the weather stays cold and nutrients are not released from the soil.
- ✓ to thumb-prune multiple bud eyes.
- ✓ to use systemic granules to combat aphids or the non-toxic method of spraying bushes with a solution containing "L.O.C." or "Basic H."
- ✓ to begin early mildew prevention by using "Parnon" or "Benlace" or by conscientiously washing bushes with "L.O.C." or "Basic H."
- ✓ to check foliage for unhatched eggs containing worms or rose slugs. Spray with Malathion if worm damage is present.
- ✓ to give a side dressing of 0-10-10, when buds begin to form.

VEGETABLES

GEORGE JAMES

- ✓ to set plants of Brussel sprouts, broccoli, cabbage, cauliflower, celery, kale, onions, lettuce, and collards.
- ✓ to start seeds of beans, corn, cucumber, eggplant, pepper, summer squash, and tomatoes, in pots for protected growth. Transplant to the garden in April and May.
- ✓ to set transplants to garden of cucumber, eggplant, pepper, tomatoes, summer squash. Cover to retain heat and protect from frost.
- ✓ to set bulbs or cloves of onion and garlic.

GREEN THUMB ITEMS

- ✓ to divide chrysanthemums that need it. Select new growth from outside the old clump.
- ✓ to prune spring-flowering shrubs. Use sprigs for home decorations.

If you have not done an annual pruning of your roses it is really too late to worry about it now. The best thing to do at this time and for the remainder of the rose year is to continue to prune to maintain the strength and beauty of the bush. Clean out any dead or dying canes. Keep the center of the bush free of twiggy growth so that air may circulate freely. Then, next year (in January in San Diego County), when the various rose societies hold pruning demonstrations, attend and learn how the rosarians treat their plants. They enjoy passing on some of their secrets.

Fertilize your roses. Spend some time at the nurseries reading the labels of various fertilizer bottles or bags. In most cases, the rose food as advertised is sufficient for our needs. Don't be reluctant to use your favorite plant food on roses. They are a lot like women because they love almost any kind of attention, the more consistent the better.

Enough said; let me pass on to you the names of some of the newer varieties that the local growers think will do well in San Diego County. In the Hybrid Tea Class—a pink blend 'Alabama,' a lovely combination of red and white called 'Double Delight,' and a vibrant yellow named 'New Day'; in the Floribunda Class—one I particularly like is an apricot blend named 'Cathedral.'

One last thought to leave with you—the rose growers by-word is finger prune (disbud) for larger blossoms and stronger stems.

Much happiness with your bright, colorful rose garden. □



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6276 Brynwood Court, S.D. 92120

CONVAIR GARDEN CLUB

First Wed., Casa del Prado, 7:30 p.m.
Prs: Mrs. Virginia Soderberg-582-7098
6197 Arno Drive, S.D. 92120

EXOTIC PLANT SOCIETY

Prs: Mr. Ben Hardy-448-0659
9443 East Heaney Circle, Santee 92071

FLEURES DE LEAGUE

Sec. Mon., Homes of members, 10:30 am
Prs: Mrs. James D. Casey, Jr.-459-5322
1350 W. Muirlands Dr., La Jolla 92037
IKEBANA INTERNATIONAL CHAPTER
NUMBER 119, Fourth Wed., Casa del Prado
10:00 a.m.

Prs: Mrs. Wm. Pardoe-466-1584

7757 Topaz Lake Ave., S.D. 92119

LA JOLLA GARDEN CLUB

Third Tues., 1:00 p.m. La Jolla Women's
Club, 715 Silverado Road, La Jolla
Prs: Mrs. Bolivar Roberts-454-4988
939 Court Blvd., La Jolla, 92037

LAS JARDINERAS

Third Mon., 10:00 a.m. Homes of mem.
Prs: Mrs. Robert Conway-454-4874
7826 E. Roseland Dr., La Jolla 92037

ORGANIC GARDENING SOCIETY

Third Fri., Casa del Prado, 7:30 p.m.
Prs: John E. Miller-283-9906
4245 - 36th Street, S.D. 92104

PALOMAR DISTRICT, CALIFORNIA

GARDEN CLUBS, INC.,

Dir: Mr. Joe E. Goble-728-1286
730 S. Live Oak Park Rd., Fallbrook 92028

POINT LOMA GARDEN CLUB

Second We., S.D. Federal, Rosecrans and
and Canon, 10:00 a.m.
Prs: Mrs. Harry Ayers-224-3810
4644 Tivoli St. S.D. 92107

SAN CARLOS GARDEN CLUB

Fourth Tues., San Carlos Club, 6955
Golfcrest Drive
Prs: Mrs. Wendel Bemis-465-6834
7808 Lake Adlon Drive, S.D. 92119

SAN DIEGO BONSAI SOCIETY, Inc.

Second Sun., Casa del Prado, 1:5 p.m.
Prs: Dr. Herbert Markowitz-224-8552
876 Armada Terrace, S.D. 92106

SAN DIEGO BOTANICAL GARDEN

FOUNDATION, Inc.

Second Thurs., Casa del Prado
Prs: Mrs. Eugene Cooper-295-7938
4444 Arista Drive, S.D. 92103

SAN DIEGO CACTUS & SUCCULENT SOCIETY

Second Saturday, Casa del Prado, 1:30 pm
Prs: H. Warner Buckner-469-1391
1744 Englewood Drive, Lemon Gr.

SAN DIEGO CAMELLIA SOCIETY

Third Wed., Casa del Prado, 7:30 p.m.
Prs: Capt. Ben Berry-435-2562
471 Country Club Lane, Coronado 92118

SAN DIEGO CHAPTER, CALIFORNIA

NATIVE PLANT SOCIETY

Fourth Wed., Casa del Prado, 7:30 p.m.
Prs: Mrs. Helen Witham-463-4785
5175 - 68th Street, S.D. 92115

SAN DIEGO COUNTY DAHLIA SOCIETY

Fourth Tues., Casa del Prado, 7:30 p.m.
Prs: Mr. Gerald Lohmann-279-5135
6616 Rockglen Ave., S.D. 92111

SAN DIEGO COUNTY ORCHID SOCIETY

First Tues., Casa del Prado, 7:30 p.m.
Prs: Mr. Ben Hardy-448-0659
9443 East Heaney Circle, Santee, 92071

SAN DIEGO COUNTY WILDLIFE FED.

Prs: Steven Licata-296-2984
4525 Hamilton Street, S.D. 92116

SAN DIEGO EPIPHYLLUM SOCIETY

Second Wed., Casa del Prado, 7:30 p.m.
Prs: Mr. Eugene Lund-469-1677
5666 Aztec Drive, La Mesa, 92041

SAN DIEGO FUCHSIA SOCIETY

Second Mon., Casa del Prado, 7:30 p.m.
Prs: Mr. William Selby-424-3432
1333 Triton Avenue, S.D. 92154

SAN DIEGO GERANIUM SOCIETY

Second Tues., Casa del Prado, 7:30 p.m.
Prs: Mr. Larry L. Sisk-283-2776
3179 No. Mountain View Drive, SD 92116

SAN DIEGO/IMPERIAL COUNTY IRIS SOC.

Third Sun., Casa del Prado, 1:30 p.m.
Prs: Mr. Frank Marko-745-2554
Rt. 4, Box 439-D, Valley Cntr. 92082

SAN DIEGO ROSE SOCIETY

Third Mon., Casa del Prado, 7:30 p.m.
Prs: Mrs. Carl Truby-422-3350
1035 Monserate Ave, Chula Vista

SAN DIEGUITO BRANCH, AMERICAN FUCHSIA SOCIETY

Prs: Dorothy S. Behrends-753-3453
442 Orpheus Ave., Encinitas 92024
SAN DIEGUITO GESNERIAD CLUB
Prs: Mrs. Roman Shore-728-7044

4471 Estada Drive, Oceanside 92054

SOUTHWEST HEMEROCALLIS SOCIETY

Four meetings per year, Oceanside
Federal Savings, Vista, California
Prs: Sanford Roberts-443-7711

15011 Oak Creek Road, El Cajon

SOUTHWESTERN GROUP, JUDGES'

COUNCIL CALIFORNIA GARDEN CLUBS,

Inc., First Wed., Casa del Prado, 10:30 a.m.

Prs: Mrs. Donald Innis-225-1464

3211 Trumbull, S.D. 92106

VILLAGE GARDEN CLUB of La Jolla

Fourth Thurs., 1:00 p.m. La Jolla
United Methodist Church, 6063 La Jolla
Blvd., La Jolla, Ca, 92037

Prs: Mrs. George Bauhan-459-9024

5630 Bellevue Ave, La Jolla, 92037

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